THE CLAIMS

What is claimed is:

1. A system application comprising:

a headset having a memory for storing a preference setting; and

a host adapter coupled to the headset and having a performance parameter, wherein the host adapter is capable of accessing the memory in order to read the preference setting.

2. The system application of claim 1, wherein the host adapter accesses the memory through a serial port in order to read the preference setting from the memory.

3. The system application of claim 1, wherein the memory is implemented within a headphone of the headset.

4. The system application of claim 1, wherein the memory is implemented within a cable quick disconnect of the headset.

5. The system application as claimed in claim 1, wherein the host adapter adjusts its performance parameter in accordance with the preference setting read from the memory.

6. The system application of claim 3, wherein the preference setting is one of a preferred volume level , a preferred treble level , a preferred bass level and a preferred balance level.

7. The system application of claim 3, wherein the performance parameter of the host adapter may be further manually adjusted by a user to a

new preference level, which is then stored in the memory, thereby overwriting the previously stored preference setting.

8. An apparatus comprising a headset having at least one headphone for receiving audio signals, at least one microphone assembly for transmitting audio signals and a digital memory device for storing performance characteristics of the at least one headphone.

9. The apparatus of claim 8 wherein the digital memory device stores filtering and compensation circuitry parameters and settings which are determined as a function of the performance characteristics of the at least one headphone.

10. The apparatus of claim 8, further comprising a host adapter coupled to the headset having for transmitting audio signals to the at least one headphone of the headset and receiving audio signals from the at least one microphone assembly of the headset, said host adapter having a memory interface for accessing the digital memory device, in order to read the performance characteristics of the at least one headphone which are stored in the digital memory device of the headset.

11. The apparatus of claim 10, wherein the host adapter adjusts the audio signals transmitted to the at least one headphone as a function of the performance characteristics read from the memory.

12. The apparatus of claim 9, further comprising a host adapter coupled to the headset having for transmitting audio signals to the at least one headphone of the headset and receiving audio signals from the at least one microphone assembly of the headset, said host adapter having adjustable filtering and compensation circuitry and a memory interface for accessing the

digital memory device, in order to read the filtering and compensation circuitry parameters and settings which are stored in the digital memory device of the headset.

13. The apparatus of claim 12, wherein the host adapter adjusts its adjustable filtering and compensation circuitry as a function of the parameters and settings read from the memory.

14. The apparatus as claimed in claim 8, wherein the performance characteristics of the at least one headphone include at least one of a receive signal frequency response, a receive signal sensitivity, a receive impedance characteristic, a receive signal gain, and a receive signal to noise ratio.

15. An apparatus comprising a headset having at least one headphone for receiving audio signals, at least one microphone assembly for transmitting audio signals and a digital memory device for storing performance characteristics of the at least one microphone assembly.

16. The apparatus of claim 15 wherein the digital memory device stores filtering and compensation circuitry parameters and settings which are determined as a function of the performance characteristics of the at least one microphone assembly.

17. The apparatus of claim 15, further comprising a host adapter coupled to the headset for transmitting audio signals to the at least one headphone of the headset and receiving audio signals from the at least one microphone assembly of the headset; wherein the host adapter unit includes a memory interface for accessing the memory device in order to read the performance characteristics of the at least one microphone assembly stored in the digital memory device of the headset.

18. The apparatus of claim 17, wherein the host adapter adjusts the audio signals received from the at least one microphone assembly of the headset as a function of the performance characteristics read from the memory.

19. The apparatus of claim 16, further comprising a host adapter coupled to the headset having for transmitting audio signals to the at least one headphone of the headset and receiving audio signals from the at least one microphone assembly of the headset, said host adapter having adjustable filtering and compensation circuitry and a memory interface for accessing the digital memory device, in order to read the filtering and compensation circuitry parameters and settings which are stored in the digital memory device of the headset.

20. The apparatus of claim 19, wherein the host adapter adjusts its adjustable filtering and compensation circuitry as a function of the parameters and settings read from the memory.

21. The apparatus as claimed in claim 15, wherein the performance characteristics of the at least one microphone include at least one of a transmit signal frequency response, a transmit signal sensitivity, a transmit impedance characteristic, a transmit signal gain, and a transmit signal to noise ratio.

22. An apparatus comprising:

a headset having at least one headphone for receiving audio signals and a microphone assembly for transmitting audio signals, wherein the headset further includes a memory device for storing a first set of performance characteristics for the at least one headphone and a second set of performance characteristics for the microphone assembly.

23. The apparatus as claimed in claim 22, further comprising:

a host adapter coupled to the headset for transmitting audio signals to the at least one headphone and receiving audio signals from the microphone, wherein the host adapter includes a processor for accessing the memory device and reading either one or both of the first set of performance characteristics and the second set of performance characteristics.

24. The apparatus as claimed in claim 23, wherein the host adapter adjusts the audio signals transmitted to the at least one headphone as a function of the first set of performance characteristics read from the memory device of the headset.

25. The apparatus as claimed in claim 22, wherein the first set of performance characteristics include a receive frequency response of the at least one headphone, a receive audio level at the at least one headphone, a receive impedance characteristic of the at least one headphone, a receive signal gain of the at least one headphone, and a receive signal to noise ratio at the at least one headphone.

26. The apparatus as claimed in claim 24, wherein the host adapter adjusts the audio signals received from the microphone assembly of the headset as a function of the second set of performance characteristics read from the memory device of the headset.

27. The apparatus as claimed in claim 22, wherein the second set of performance characteristics include a transmit frequency of the microphone assembly, a transmit audio level of the microphone assembly, an impedance characteristic of the microphone assembly, a transmit signal gain of the microphone assembly, and a signal to noise ratio of the microphone assembly.

28. The apparatus of claim 22 wherein the digital memory device stores a first set of filtering and compensation circuitry parameters and settings which are determined as a function of the first set of performance characteristics of the at least one headphone and a second set of filtering and compensation circuitry parameters and settings which are determined as a function of the second set of performance characteristics of the microphone assembly.

29. The apparatus as claimed in claim 23, further comprising:

a host adapter coupled to the headset for transmitting audio signals to the at least one headphone and receiving audio signals from the microphone assembly, wherein the host adapter includes:

filtering and compensation circuitry, and

a processor for accessing the memory device and reading either one or both of the first set of filtering and compensation circuitry parameters and the second set of filtering and compensation circuitry parameters.

30. The apparatus as claimed in claim 29, wherein the host adapter adjusts its filtering and compensation circuitry in order to adjust the audio signals transmitted to the at least one headphone as a function of the first set of filter and compensation circuitry parameters read from the memory device of the headset.

31. The apparatus as claimed in claim 29, wherein the host adapter adjusts the its filtering and compensation circuitry in order to adjust the audio signals received from the microphone assembly of the headset as a function of the second set of filtering and compensation circuitry parameters read from the memory device of the headset.

32. A process for manufacturing a headset having at least one headphone and a microphone assembly, comprising the steps of:

enclosing a memory device within a headphone or cable quick disconnect of the headset;

measuring performance characteristics of the headset; and

storing the performance characteristics in the memory device.

33. The process claimed in claim 32, wherein the step of measuring performance characteristics of the headset includes:

coupling the headset to a test apparatus;

transmitting an audio test pattern from the test apparatus to the at least one headphone of the headset; and

measuring performance characteristics of the at least one headphone.

34. The process claimed in claim 33, wherein performance characteristics of the at least one headphone include a frequency response of the at least one headphone, a receive sensitivity of the at least one

headphone, a received signal audio level at the at least one headphone, an impedance characteristic of the at least one headphone, a received signal gain at the at least one headphone, and a received signal-to-noise ratio at the at the at least one headphone.

35. The process claimed in claimed 33, further comprising the steps of:

determining a first set of filtering and compensation parameters as a function of the performance characteristics of the at least one headphone; and

storing the first set of filtering and compensation parameters in the memory of the headset.

36. The process claimed in claim 33, wherein the audio test pattern is stored in the memory device for future reference.

37. The process claimed in claim 32, wherein the step of measuring performance characteristics of the headset includes:

coupling the headset to a test apparatus;

transmitting an audio test signal from the microphone assembly of the headset to the test apparatus; and

measuring performance characteristics of the microphone assembly.

38. The process claimed in claim 37, wherein performance characteristics of the microphone assembly include a transmit signal audio level from the microphone assembly, a transmit sensitivity of the microphone assembly, an impedance characteristic of the microphone assembly, and a transmit signal-to-noise ratio from the microphone assembly.

39. The process claimed in claimed 37, further comprising the steps of:

determining a second set of filtering and compensation parameters as a function of the performance characteristics of the microphone assembly; and

storing the first set of filtering and compensation parameters in the memory of the headset.

40. The process of claim 37, wherein the audio test signal is stored in the memory device for future reference.

41. A method for adjusting an audio signal provided to a headset having at least one headphone and a memory device, the method comprising:

storing a performance characteristic of the at least one headphone in the memory device of the headset;

reading the performance characteristic stored in the memory device; and

adjusting the audio signal provided to the headset as a function of the performance characteristic read from the memory device.

42. The method of claim 41 wherein the audio signal is provided to the headset from a host adapter which automatically adjusts the audio signal using filtering and compensation circuitry before it is provided to the headset as a function of the performance characteristic read from the memory device.

43. The method of claim 42, wherein the memory device includes a serial port and further wherein the host adapter communicatively couples to the memory device through the serial port in order to read the performance characteristic.

44. The method of claimed 41, wherein the performance characteristic of the at least one headphone is one of a frequency response of the at least one headphone, a receive sensitivity of the at least one headphone, a received signal audio level at the at least one headphone, an impedance characteristic of the at least one headphone, a received signal gain at the at least one headphone, and a received signal-to-noise ratio at the at the at least one headphone.

45. A method for adjusting an audio signal received from a headset having a microphone assembly and a memory device, the method comprising:

storing a performance characteristic of the microphone assembly in the memory device of the headset;

reading the performance characteristic stored in the memory device; and

adjusting the audio signal received from the headset as a function of the performance characteristic read from the memory device.

46. The method of claim 45 wherein the audio signal is received from the headset by a host adapter and the host adapter automatically adjusts the audio signal received from the headset as a function of the performance characteristic read from the memory device.

47. The method of claim 46, wherein the memory device includes a serial port and further wherein the host adapter communicatively couples to the memory device through the serial port in order to read at least one of the plurality of performance characteristics.

48. The process claimed in claim 45, wherein performance characteristic of the microphone assembly is one of a frequency response of the microphone assembly, a transmit sensitivity of the microphone assembly, a

transmit signal audio level of the microphone assembly, an impedance characteristic of the microphone assembly, a transmit signal gain from the microphone assembly, and a transmit signal-to-noise ratio of the microphone assembly.

49. A method for adjusting an audio signal which is received from or transmitted to a headset having at least one headphone, a microphone, and a memory device, the method comprising:

storing a plurality of performance characteristics for the headset in the memory device of the headset;

reading at least one of the plurality of performance characteristics from the memory device; and

adjusting the audio signal which is received from or transmitted to the headset as a function of the at least one performance characteristic read from the memory device.

50. The method of claim 49 wherein a host adapter reads at least one of the plurality of performance characteristics from the memory device and either:

receives the audio signal from the microphone of the headset and adjusts the received audio signal in accordance with the performance characteristic read from the memory device of the headset; or

receives the audio signal to be transmitted to the headset from an exterior system application, adjusts the audio signal as a function of the performance characteristic read from the memory device of the headset, and transmits the adjusted audio signal to the headset.

51. The method of claim 50, wherein the memory device includes a serial port to which the host adapter communicatively couples in order to read at least one of the plurality of performance characteristics from the memory device.

52. An apparatus for storing and accessing information related to a headset comprising:

a memory device built into the headset.

53. The apparatus of claim 52, wherein the memory device stores a production date of the headset, a serial number of the headset, a service date and a type of service performed on the headset.

54. The apparatus of claim 53, wherein the type of service performed may include a routine testing service, a routine maintenance service, a repair service or a replacement of parts service.

55. A method for tracking a service history of a headset having a memory device, the method comprising:

storing a service date and type of service performed on the headset in the memory device; and

reading the service date and type of service performed on the headset from the memory.

56. The method of claim 55, wherein the type of service performed may include a testing service, a maintenance service, a repair service or a replacement of parts service.

57. A method for automatically setting performance parameters of a host adapter to various user defined preferences for different users of the host adapter, the method comprising:

storing a first set of user defined preferences for a first user in a headset having a memory device;

storing a second set of user defined preferences for a second user in the headset having the memory device;

retrieving the first set of user defined preferences from the memory when the headset is coupled to the host adapter and used by the first user and, thereafter setting each of the performance parameters of the host adapter to the first set of user defined preferences retrieved from the memory; and

retrieving the second set of user defined preferences from the memory when the headset is coupled to the host adapter and used by the second user, and thereafter setting each of the performance parameters of the host adapter to the second set of user defined preferences retrieved from the memory.

58. The method of claim 57, wherein the first set of user defined preferences include a volume level preferred by the first user, a bass level preferred by the first user, a treble level preferred by the first user, a balance level preferred by the first user.

59. The method of claim 57, wherein the second set of user defined preferences include a volume level preferred by the second user, a bass level preferred by the second user, a treble level preferred by the second user, a balance level preferred by the second user.

60. A system for automatically setting performance parameters of a host adapter to various user defined preferences for different users of the host adapter, the system comprising:

the host adapter;

a headset with memory for storing a first set of user defined preferences for a first user and storing a second set of user defined preferences for a second user;

a memory interface within the host adapter for retrieving the first set of user defined preferences when the headset with memory is coupled to the host adapter and used by the first user, thereafter setting a series of performance parameters of the host adapter to the first set of user defined preferences; and retrieving the second set of user defined preferences when the headset with memory is coupled to the host adapter and used by the second user, thereafter setting the performance parameters of the host adapter to the second set of user defined preferences.

61. The system of claim 60, wherein the first set of user defined preferences include a volume level preferred by the first user, a bass level preferred by the first user, a treble level preferred by the first user, a balance level preferred by the first user.

62. The system of claim 60, wherein the second set of user defined preferences include a volume level preferred by the second user, a bass level preferred by the second user, a treble level preferred by the second user, a balance level preferred by the second user.

63. A host adapter for providing signals to and from a headset having a memory device, the host adapter comprising:

an adjustable series of performance parameters for adjusting the signals provided to and from the headset;

a memory interface for retrieving a first set of user defined preferences when the headset with memory device is coupled to the host adapter and used by a first user, the host adapter thereafter setting the adjustable series of performance parameters of the host adapter to the first set of user defined preferences in order to adjust the signals provided to and from the headset with memory in accordance with the first set of user defined preferences; and retrieving a second set of user defined preferences when the headset with memory is coupled to the host adapter and used by a second user, the host adapter thereafter setting the adjustable series of performance parameters of the host adapter to the second set of user defined preferences in order to adjust the signals provided to and from the headset in accordance with the second set of user defined preferences.

64. The system of claim 63, wherein the adjustable series of performance parameters include a volume level, a bass level, a treble level, and a balance level.

65. The system of claim 63, wherein the first set of user defined preferences include a volume level preferred by the first user, a bass level preferred by the first user, a treble level preferred by the first user, a balance level preferred by the first user.

66. The system of claim 63, wherein the second set of user defined preferences include a volume level preferred by the second user, a bass level preferred by the second user, a treble level preferred by the second user, a balance level preferred by the second user.

67. A host adapter coupled to a headset having at least one headphone, a microphone assembly and a memory device, the host adapter used for transmitting audio signals to at least one headphone of the headset and receiving audio signals from the microphone assembly of the headset, the host adapter comprising:

a memory interface for accessing the memory device in order to read a first of set of performance characteristics of the microphone assembly stored in the digital memory device of the headset.

68. The host adapter of claim 67, further comprising filtering and filtering and compensation circuitry for adjusting the audio signals received from the microphone assembly of the headset as a function of the performance characteristics of the microphone assembly read from the memory.

69. The apparatus as claimed in claim 67, wherein the performance characteristics of the microphone assembly include at least one of a transmit signal frequency response, a transmit signal sensitivity, a transmit impedance characteristic, a transmit signal gain, and a transmit signal to noise ratio.

70. A host adapter coupled to a headset having at least one headphone, a microphone assembly and a memory device, the host adapter used for transmitting audio signals to at least one headphone of the headset and receiving audio signals from the microphone assembly of the headset, the host adapter comprising:

a memory interface for accessing the memory device in order to read a second of set of performance characteristics of the at least one headphone stored in the digital memory device of the headset.

71. The host adapter of claim 60, further comprising filtering and compensation circuitry for adjusting the audio signals transmitted to the at least one headphone of the headset as a function of the performance characteristics of the at least one headphone read from the memory.

72. The apparatus as claimed in claim 67, wherein the performance characteristics of the at least one headphone include at least one of a receive signal frequency response, a receive signal sensitivity, a receive impedance characteristic, a receive signal gain, and a receive signal to noise ratio.